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Resistor color code practice worksheet with answers answer key free printable

1. The color code for a 333kΩ, ±5% five band resistor is Orange, Orange, Red, Orange, Gold. 2. In a 6 band color code, the 6th band represents the Temperature Coefficient Multiplier. 3. The tolerance value for a grey color in the tolerance band is ±0.05%. 4. The color code for a 5KΩ, tolerance ±5% resistor is Green, Black, Red, Silver. 5. The tolerance of a 3 band resistor is None specified. 6. The value of a six-band resistor with colors Green, Blue, Black, Orange, Violet, Brown is 560KΩ, ±0.10%, Temp co-efficient 100ppm/°C. 7. The value of a 4 band resistor with bands Green, Blue, Orange, Gold is 56KΩ, ±2%. 8. The multiplier value for the color blue in the multiplier band is 1. 9. The color that represents digit 7 in resistor color code is Brown. 10. The value of a resistor with first three color bands as Red, Black, and Orange is 10kΩ. The color-coded system used in resistors helps determine their resistance value and tolerance range. By decoding the colors using the resistor color code, one can find the correct answer. The resistor's first band is brown (1), second band is also brown (1), third band is gold (5%), and the multiplier is 10 times that value, which equals 41 Ohms with a 5% tolerance. The actual resistance value can vary between 389.5 Ohms and 430.5 Ohms. A different resistor has a brown band as the first digit (1), black as the second digit (0), red as the multiplier (100), and gold for a 5% tolerance, making it equal to 1000 Ohms with a 5% tolerance range of 50 Ohms. Copper's low electrical resistivity is measured at 1.724x10-8. Resistors are components that control the flow of current in a circuit by providing resistance, helping to regulate the amount of electricity flowing through it. ## Explanation By It's Size The wattage of a resistor can be determined by its size. Different sizes of resistors are designed for specific power levels. Larger resistors can handle higher wattages, while smaller ones are suitable for lower wattages. Referencing a chart or datasheet provides the necessary information to determine the wattage rating. ## It Increases Decreasing resistance in a system, as per Ohm's Law (V = IR), increases current flow. This happens because reduced resistance offers less opposition to electric current, allowing more current to pass through.